

## INDIANA OOLITIC LIMESTONE.

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The following table of tests, with explanatory formulas, made by a distinguished architect of New York City, is given for information of builders, engineers and purchasers. The table of breakages will apply closely to the other Oolitic Limestones of Indiana, and shows the usual superiority over sandstone of from about ten to thirty per cent. Builders should not neglect this strong, cheap, durable material.

JOHN COLLETT, *State Geologist.*



## A TABLE

*Exhibiting the Comparative Strength of several varieties of Sandstone in common use for Building Purposes as compared with Salem (Oolitic) Stone, from Salem, Washington County, Indiana, showing the great superiority of Salem Stone over all other Stones named.*

The Tests were made by R. S. HATFIELD, Architect, 31 Pine Street, New York City.

In the formula,  $S = \frac{lw}{bd^2}$ ,  $l$  is in feet and  $b$  and  $d$  are in inches, while  $w$  is in pounds. Hence  $S$  is the weight in pounds required to break a bar one inch square and one foot long in the clear between the bearings. In the third column of the table the lengths of the specimens tested are stated in inches; the breadths and depths are also in inches, and the breaking weights in pounds.

NAME.	LOCATION.	Length. Inches.	Breadth. Inches.	Depth. Inches.	Breaking Weight. Lbs.	$S = \frac{lw}{bd^2}$ See Note.*
Oolitic Limestone . .	Salem, Indiana . .	13.	2.02	1.98	747.	93,949
" " . .	" " . .	13.	2.02	2.03	771.	92,621
" " . .	" " . .	13.	2.02	2.01	788.	96,557
" " . .	" " . .	13.	1.98	2.00	809.	102,146
" " . .	" " . .	13.	2.03	2.00	788.	97,044
" " . .	" " . .	13.	2.02	1.98	745.	94,075
Sandstone . . . .	Amherst, Ohio . .	5.	3.25	1.22	389.	32,506
" " . . . .	" " . . . .	14.	1.47	3.05	395.	33,700
" " . . . .	" " . . . .	3.	3.45	1.06	536.	34,568
" " . . . .	" " . . . .	14.	1.47	3.05	410.	34,980
" " . . . .	" " . . . .	14.	1.45	3.07	436.	37,221
" " . . . .	Berea, " . . . .	4.	1.63	1.03	200.	38,552
" " . . . .	" " . . . .	4.5	1.97	1.01	227.	42,359
" " . . . .	Marietta, " . . .	6.	1.43	1.58	401.	56,165
" " . . . .	" " . . . .	6.	2.05	1.25	395.	61,659
" " . . . .	" " . . . .	6.	2.03	.97	240.	62,826
" " . . . .	Dorchester, N. S .	14.	1.45	3.16	786.	63,333
" " . . . .	" " . . . .	14.	1.43	3.15	781.	64,216
" " . . . .	" " . . . .	14.	1.45	3.10	780.	66,980
" " . . . .	Portland, Conn. . .	14.	1.35	2.98	665.	64,715
" " . . . .	" " . . . .	14.	1.38	2.97	761.	72,936
" " . . . .	Belleville, N. J. . .	14.	1.50	2.97	862.	76,006
" " . . . .	" " . . . .	14.	1.50	2.97	1000.	88,174
" " . . . .	" " . . . .	14.	1.48	2.97	990.	88,472

\* NOTE.—Weight required to break a bar one inch square and one foot long in the clear between bearings.